

In the Specification:

Please amend the specification as follows:

On page 1, after the title, please insert:

--FIELD OF THE INVENTION--

On page 1, after line 7, please insert:

--BACKGROUND OF THE INVENTION--

On page 4, after line 11, please insert:

--SUMMARY OF THE INVENTION

A nucleic acid which encodes a polypeptide with the bioactivity of a zeta-carotene desaturase, comprises the amino acid sequence of SEQ ID NO: 6.

DETAILED DESCRIPTION--

In the Claims:

Please cancel Claims 22-24.

Please amend Claims 1-21 and 25-27 as follows:

1. (Amended) A nucleic acid which encodes a polypeptide from tobacco with the bioactivity of a zeta-carotene desaturase, comprising the amino acid sequence of SEQ ID NO: 6.
2. (Amended) A nucleic acid according to Claim 1, wherein the nucleic acid encodes a polypeptide with the amino acid sequence of SEQ ID NO: 6.
3. (Amended) A nucleic acid according to Claim 1, wherein the nucleic acid is a single-stranded or double-stranded DNA or RNA.
4. (Amended) A nucleic acid according to Claim 3, wherein the nucleic acid is a fragment of genomic DNA or cDNA.